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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,611	11/20/2003	Kang Soo Seo	1740-000064/US	7147
30593 7590 01/02/2008 HARNESSE, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER DEBELIE, MITIKU W	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 01/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/716,611

Applicant(s)

SEO ET AL

Examiner

Mitiku Debelie

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/20/2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 01/21/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 01/21/2005 has been considered by the examiner.

Claim Objections

3. Claim 5 is objected to because of the following informalities: line 2 of claim 5 recites, "still address" but still address is not defined. The Examiner interprets the phrase as "still image address"

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **Claims 1 - 16** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 1 defines a recording medium having a data structure for managing reproduction of at of least one still image recorded on the recording medium. The claimed invention would have been statutory had it been worded to include computer program embedded in a computer readable medium. Computer-readable medium encoded with a computer program is a computer element

which defines structural and functional interrelationship between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashiwagi et al. (US Publication Number 2004/0179820).

8. **Regarding claim 1**, Kashiwagi discloses a recording medium (M, Fig. 2) having a data structure for managing reproduction of at least one still image recorded on the recording medium, comprising (see paragraph [0097]):

a recording area (data recording surface RS1, Fig. 4) recording a clip stream file (video packets V1, V2, Fig. 17) and a clip information file (NV, Fig. 17) associated with the clip stream file (see paragraph [0158]), the clip stream file (V1, V2) including at least video data (V1, Fig. 17) for a still image (VOBU) (see paragraph [0238]), the clip information file (NV) including at least an entry point map (PCI, DSI, Fig 20), the entry point map (PCI, DSI) including entry point (PCI general information, DSI general

information), the entry point providing at least an address (SML_AGL_C1-DSTA, Fig. 20) of the still image (see paragraph [0534]).

Regarding claim 2, Kashiwagi teaches a recording medium (RS1) wherein the entry point provides at least a start address (NT_ILVU_SA, Fig. 20) of the video data forming the still image (see paragraph [0267]).

Regarding claim 3, Kashiwagi teaches a recording medium (RS1) wherein the entry point (PCI, DSI) maps a presentation time (start PTM of VOB VOBU_S_PTM, end PTM of VOB VOBU_E_PTM, Fig. 20) of video data forming the still image (VOB) to an address (Destination address of angle cell number 1 SML_AGL_C1_DSTA, Fig. 20) of the video data forming the still image (see paragraphs [0260] and [0263]).

Regarding claim 4, Kashiwagi teaches a recording medium (RS1) wherein the clip stream file (V1, V2) includes at least video data (video packets V1, V2, Fig. 17) for more than one still image (see paragraphs [0244] - [0245]).

The limitation, "the entry point map includes an entry point associated with each still image" reads on the limitation, "the entry point map including entry point, the entry point providing at least an address of the still image" which is analyzed in relation to claim 1.

The limitation, "each entry point provides at least an address of the associated still image" reads on the limitation, "the entry point provides at least a start address of the video data forming the still image" which is analyzed in relation to claim 2.

Regarding claim 5, claim 5 recites, "The recording medium of claim 4, wherein each entry point provides at least a start address of the video data forming the associated still address." This claim reads on claim 2 above.

Regarding claim 6, claim 6 recites, "The recording medium of claim 4, wherein each entry point maps a presentation time of the associated still image to the address of the associated still image." This claim reads on claim 3 above.

Regarding claim 7, Kashiwagi teaches a recording medium (RS1) further comprising a playlist (VOB#1, Fig. 16) stored in the recording area, the playlist (VOB#1) including at least one playitem (CELL#1, Fig. 16) indicating at least a portion of the video data in the clip stream file (video packs V1, V2, Fig. 17) to reproduce (see Fig. 73, paragraphs [0351] - [0352]).

The limitation, "the portion of the video data in the clip stream file (video packs including the still image)" reads on the limitation "the clip stream file including at least video data for a still image" which is analyzed in relation to claim 1.

Regarding claim 8, Kashiwagi teaches a recording medium (RS1) wherein the recording area further includes another clip stream file (audio pack A1, A2 Fig. 17), and the another clip includes at least audio data (see paragraph [0242]); and

the playlist (VOB#1, Fig. 16) further includes at least one sub-playitem (VOBU#1 Figs. 16) indicating a portion of the audio data to reproduce (VOBUs of MPEG data inherently include reproducible audio and video see Fig. 17, paragraph [0250]).

Regarding claim 9, Kashiwagi teaches a recording medium wherein the playitem (CELL#1 Fig. 16) and sub-playitem (VOBU#1 Figs. 16) provide for reproducing

the clip stream file (video packs V1, V2, Fig. 17) and the another clip stream file (audio pack A1, A2 Fig. 17) such that the video data and the audio data are played in time synchronization with one another (see paragraphs [0249] and [0258]).

Regarding claim 10, Kashiwagi teaches a recording medium wherein the playitem (CELL#1 Fig. 16) indicates a start point (C_FVOBU SA) and an end point (C_FVOBU SA) for reproducing the video data of the clip stream file (see paragraphs [0234] – [0235]) the sub-playitem (VOBU#1 Figs. 16) indicates a start point (A_STTM, Fig. 29) and an end point (A_ENDTTM, Fig. 29) for reproducing the audio data of the another clip stream file (see paragraphs [0408], [0419] – [0420],[0478] with special emphasis on lines 6 - 7).

Regarding claim 11, grounds for rejecting claim 10 apply for claim 11 in its entirety.

Regarding claim 12, Kashiwagi teaches a recording medium wherein the playitem (CELL#1 Fig. 16) indicates to reproduce the still image (each sub-playitem (VOBU#1), which is contained in a playitem (CELL#1 Fig. 16) which inherently starts with a still picture, has a navigation pack associated with it that determines reproduction sequence see paragraph [0241], with special emphasis on lines 4 – 9).

Regarding claim 13, Kashiwagi teaches a recording medium wherein the playitem (CELL#1,) further indicates a duration to display the still image (see Fig. 20, paragraph [0224], by serving as access point it automatically sets the playback (display) duration. Setting duration is inherent characteristic of Kashiwagi in that any image

reproduced takes up a preset interval time (display life time) on the screen, see paragraph [0142]).

Regarding claim 14, Kashiwagi teaches a recording medium further comprising a playlist (VOB#1, Fig. 16) indicating to reproduce the still image in the clip stream file (see paragraph [0351], the cells (e.g. CELL #10, which are part of the VOB, indicate playback sequence as described in relation to claim, see paragraph [0219], lines 7 - 9).

The limitation, "play list stored in the recording area" has been analyzed in relation to claim 7 above.

Regarding claim 15, Kashiwagi teaches a recording medium wherein the playlist (VOB#1, Fig. 16) indicates timing for sequentially reproducing a number of the still images sequence (see start time of video material VOB_VTS, end time of video material VOB_VEND Fig. 28, PARAGRAPH [0351]).

The limitation, "the clip stream file includes video data representing more than one still image" has been analyzed in relation to claim 4 above.

Regarding claim 16, Kashiwagi teaches a recording medium wherein the playlist (VOB#1, Fig. 16) provides for selectively reproducing the still images (see Fig. 24, paragraph [0346]) (anyone of the VOBs, VOB-B – VOB-D, can be selected to be reproduced and each single still image in the VOBs get reproduces accordingly).

Regarding claims 17 and 18, these claims are recording method and reproducing method claims corresponding to the apparatus claim 1. Therefore, claims 17 and 18 are analyzed and rejected as previously discussed with respect to claim 1.

Regarding claim 19, Kashiwagi teaches an apparatus for recording a data structure for managing reproduction of at least one still image on a recording medium, comprising:

a driver (recorder 1200, Fig. 2) for driving an optical recording device to record data on the recording medium (M) (see paragraph [0107]);

a controller (Encode system controller 200) for controlling the driver (see paragraph [0107]). Kashiwagi is silent on controlling a driver to record a clip stream File and a clip information File associated with the clip stream File on the recording medium, the clip stream File including at least video data for a still image, the clip information file including at least an entry point map, the entry point map including an entry point, the entry point providing at least an address of the still image. However it is inherent characteristics of the device of Kashiwagi to incorporate a controlling a driver to record a clip stream File and a clip information File associated with the clip stream File on the recording medium, the clip stream File including at least video data for a still image, the clip information file including at least an entry point map, the entry point map including an entry point, the entry point providing at least an address of the still image.

Regarding claim 20, Kashiwagi teaches an apparatus for recording a data structure for managing reproduction of at least one still image on a recording medium, comprising:

a driver (reproducing media driving unit 2004, Fig. 3) for driving an optical recording device to reproduce data recorded on the recording medium (M) (see paragraph [0135]);

a controller (reproducing controller 2002, Fig. 3) for controlling the driver to reproduce (see paragraph [0136]). Kashiwagi is silent on controlling a driver to reproduce a clip stream file and a clip information file associated with the clip stream file from the recording medium, the clip stream file including at least video data for a still image, the clip information file including at least an entry point map, the entry point map including an entry point, the entry point providing at least an address of the still image. However it is inherent characteristics of the device of Kashiwagi to incorporate a controlling a driver to reproduce a clip stream file and a clip information file associated with the clip stream file from the recording medium, the clip stream file including at least video data for a still image, the clip information file including at least an entry point map, the entry point map including an entry point, the entry point providing at least an address of the still image.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitiku Debelie whose telephone number is (571) 270 1706. The examiner can normally be reached on Mon - Fri 8:00 - 5:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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MD
12/09/2007

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